

Dr. Debesh Sharma

Post-Doctoral Fellow

Supervisor- Prof. Swadhin Kumar Mandal

Research Interest- *Designing porous materials for its application in heterogeneous catalysis*

Emails- debesh360@iiserkol.ac.in & debesh360@gmail.com

A brief overview about myself:

I joined Prof. Mandal's group as an institute post-doctoral fellow in June 2024. I completed my B.Sc. honours from St. Joseph's College, Darjeeling and my Masters from Annamalai University, Annamalai Nagar, Chidambaram. I completed my PhD. from Sikkim University, East-Sikkim under the supervision of Dr. Anand Pariyar. I am expertise in synthesizing organic ligands, and inorganic materials such as metal-organic frameworks (MOFs), metal-complexes, metal oxides and perovskites. I have experience in both homogeneous and heterogeneous catalysis and can perform inert reactions efficiently using the glove box or Schlenk line technique. I have also presented my research work in both international and national seminars. Currently, I am working on the functionalization of phenalenyl (PLY) based system for its utilization as a metal-free heterogeneous catalyst in targeted organic transformation.

List of publications:

- Rasaily, S.; Chettri, S.; Sharma, D.; Baruah, K.; Dewan, R.; Tamang, S.; Pariyar, A. *Inorganic Chemistry*, **2024**, 63, 17846-17855
- Chettri, S.; Wu, LT.; Rasaily, S.; Sharma, D.; Gurung, B.; Dewan, R.; Tamang S.; Jiang, J. C.; and Pariyar, A. *Catal. Sci. Technol.*, **2024**, 14, 202-212
- Sharma, D.; Rasaily, S.; Chettri, S.; Sureka, D.; Tamang, S.; and Pariyar, A. *Inorg. Chem.* **2023**, 62, 11, 4540–4549
- Rasaily, S.; Baruah, K.; Sharma, D.; Lepcha P.; Biswas S.; Biswas A.; Tamang, S.; and Pariyar, A.* *Inorg. Chem.* **2023**, 62, 3026-3035
- Rasaily, S.; Sharma, D.; Pradhan, S.; Diyali N.; Chettri S.; Gurung B.; Tamang, S.; and Pariyar, A.* *Inorg. Chem.* **2022**, 61, 13685-13699
- Gurung, B.; Pradhan, S.; Sharma, D.; Bhujel, D.; Basel, S.; Chettri S.; Rasaily, S.; Pariyar, A. and Tamang, S.* *Catal. Sci. Technol.*, **2022**, 12, 5891-5898
- Sharma, D.; Rasaily, S.; Pradhan, S.; Baruah, K.; Tamang, S.; and Pariyar, A.* *Inorg. Chem.* **2021**, 60, 7794–7802.
- Pradhan, S.; Bhujel, D.; Gurung, B.; Sharma, D.; Basel, S.; Rasaily, S.; Thapa, S.; Borthakur, S.; Ling, W-L.; Saikia, L.; Reiss, P.; Pariyar, A. and Tamang, S.* *Nanoscale Adv.*, **2021**, 3, 1464-1472.